

## Research Article

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## Observations and faunistic notes on some Hemiptera and Homoptera of Bahçesaray district (Van Province, East Turkey)

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**Abstract:** Observations and faunistic notes on some Hemiptera and Homoptera of Bahçesaray district (Van Province, East Turkey). *Cesa News* 143: 1-20, 43 figs.

In this paper, the first attempt at the beginning level on the fauna of Hemiptera of Bahçesaray was made by the authors. Totally 62 species of 15 families are listed with synonyms, and distributional codes. Totally 16 species are mentioned here as new for the fauna of Van Province. Observations realized during the field studies of the authors are supplemented with pictures. Identities of some species are discussed.

**Key words:** *Hemiptera*, *Homoptera*, fauna, Bahçesaray, Van, Turkey.

The authors realized several entomological trips to the district Bahçesaray (Van Province, East Turkey), in order to determine the Lepidoptera fauna, which was completely unknown. The first results on the Lepidoptera fauna were published in 2016 and 2017, comprising 663 species (Kemal, Koçak & Ecer, 2016; Kemal & Koçak, 2016a-c, 2017a-c).

The authors investigated other pterygot groups in Bahçesaray to some degree. Now, there is a small collection, created by the authors in the last years, on other insect groups of Bahçesaray, comprising more than 210 species, preserved currently in the Collection of the Cesa. Recently, perhaps the most interesting finding was about the invasion of *Polysarcus elbursianus* (Tettigoniidae, Orthoptera) in Bahçesaray, a serious pest to the orchards (Kemal et al., 2016).

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In the present, and following papers in this serial, the observations on the pterygots of Bahçesaray will be evaluated primarily, from the faunistical standpoint.

The Hemiptera and Homoptera fauna of Van Province is currently very little known. Observational notes were published by the author in various faunistical publications (Kemal & Koçak, 2008, 2010a-b, 2013, 2014a-b, 2016d-e; Kemal & Bakan, 2011; Kemal et al., 2013; Koçak & Kemal, 2010).

The present paper comprises 62 species of 15 families (*Alydidae*, *Coreidae*, *Cydnidae*, *Lygaeidae*, *Miridae*, *Nabidae*, *Pentatomidae*, *Pyrrhocoridae*, *Reduviidae*, *Rhopalidae*, *Scutelleridae*, *Cercopidae*, *Dictyopharidae*, *Issidae*, *Ricaniidae*), recorded from the Bahçesaray district for the first time. Thus, the total number of the Pterygota fauna of Bahçesaray (incl. Lepidoptera) reached to 725. To each species, synonymous names, and the range as codes are added (Koçak & Kemal, 2017). Faunistically, 16 species are reported here as new for the fauna of Van Province. Some species, where observed in their living places of Bahçesaray are illustrated.

## List of the Hemiptera species

### *Alydidae*

Dursun, et al., 2010.

#### 1. *Camptopus bifasciatus* Fieber, 1864

Synonym: *bifasciatus* Fieber, 1864 Range (in codes): Cc AZ Nv TR IR Fa Ke Se Th AM RU 05 06 23 28 44 56 60 65 76 56F 56F1 65A 65Ai 65D 65Dn 65N 65Nb 65Np 65Nm 76B 76Bb

#### 2. *Camptopus lateralis* (Germar, 1817) (Figs. 1, 2)

Synonyms: *lateralis* Germar, 1817; *annulatus* Brullé, 1832; *geranii* Dufour, 1833; *marginalis* Herrich-Schäffer, 1835; *occipes* Herrich-Schäffer, 1835; *brevipes* Herrich-Schäffer, 1840; *undulatus* Westwood, 1842; *obscurus* Reuter, 1890

Range (in codes): PT TR AF Cc IL Pa IQ IR Ar Ab Fa Go Ke Kh Mz Se Th Ak PK IN TJ SY CN Ui 04 06 09 11 13 15 16 17 20 21 22 23 24 25 26 28 29 30 31 32 33 34 35 36 38 39 41 42 43 46 47 48 49 50 54 55 56 58 59 60 62 63 64 65 66 73 75 76 13G 13Gö 13Gğ 31F 56D 56Db 65A 65Ac3 65Ai 65Am 65Am2 65Am3 65Am4 65Au 65At 65At3 65F 65Fp 65Dç 65Fz 65N 65Np5 65Nm 73A 73Ad 73Ak

Material examined: 2 ex from Bahçesaray, Upper Mukus Valley 1850m (65Am2, 65Am3) 24 6, 4 7, 2016; 1 ex Altındere 1820m (65At3) 26 6 2016; 1 ex Paşaköy 1600m (65Ai) 25 6 2016; 1 ex Liman, Spindaran 2320m 10 8 2016, M. Kemal & A. Koçak leg. (Cesa)

#### 3. *Camptopus tragacanthae* (Kolenati, 1845) (Fig. 3)

Synonym: *tragacanthae* Kolenati, 1845 Kemal & Koçak, 2014b: 29, fig. 36. Range (in code): IR Go Th Ke Kh Ss Ab Ar Cc AZ TR UZ TJ RU AF CN Ui 06 11 13 16 17 23 35 36 38 46 50 58 60 65 76 13A 13Ac 13Ae 13Ax 13B 13Bg 13Gw 65A 65Ai 65F 65Fz 65N 65Nr3 65Nr4 65Nm 76C

Material examined: 1 ex from Bahçesaray, Paşaköy 1600m (65Ai) 22 10 2016, M. Kemal & A. Koçak leg. (Cesa)

### *Coreidae*

CoreoideaSF Team, 2017.

#### 4. *Coreus marginatus* (Linnaeus, 1758) (Fig. 4)

Synonyms: *marginatus* Linnaeus, 1758; *auriculatus* De Geer, 1773; *rostratus* Goeze, 1778; *serratum* Thunberg, 1825; *fundator* Herrich-Schäffer, 1833; *longicornis* A. Costa, 1842; *inermis* Kolenati, 1845; *syriacus* Blöte, 1935

Kemal & Koçak, 2014b: 27, fig. 33.

Range (in codes): AL AD AT BE B-H BG BY HV CZ DK EE FI FR GB DE GR HU IE IT LT LV MK MD NL NO PL PT RO SK SS ES CH UA YU DZ AZ Cc AM KG GG IL Pa LB SY TR IR Ak Koa IQ TJ RU CN Ui Nra Kun TJ TM UZ KP KR Us JP 01 04 06 08 09 10 11 12 13 17 20 22 23 25 31 34 35 36 41 48 49 56 65 73 76 12A 12Ab 13A 13Ac 13Ax 31F 31K 31Ka4 31M 56F 56Fa 56F1 65A 65Am 65Am4 65Au 65F1 65Fz 73D 73Df 76B 76Bd 76Bf 76Bh 76Bm

#### 5. *Coriomeris affinis* (Herrich-Schäffer, 1839)

Synonyms: *affinis* Herrich-Schäffer, 1839; *spinolae* Costa, 1843; *fraudatrix* Reuter, 1900; *planicornis* Lindberg, 1923; *aegyptius* Schmidt, 1939 Range (in codes): PT ES Cn MA DZ TN LY FR IT YU RO CY GR TR GB SE Cc IR EG EG11 IL Pa Hf 31 49 50 65 65A 65Am 65Am1

Material examined: 1 ex from Bahçesaray, Upper Mukus Valley 1760m (65Am1), on 10 5 2016, M. Kemal & A. Koçak leg. (Cesa)

**6. *Coriomeris denticulatus* (Scopoli, 1763)**

Synonym: *denticulatus* Scopoli, 1763

Kemal & Koçak, 2014a: 133, fig.165. Kemal & Koçak, 2014b: 28, fig.34.

Range (in codes): IL Pa TR SY Cc CN Ui 04 06 09 10 16 17 23 30 31 35 36 42 65 76 30B 30Br 36D 36Db 65A 65Aö 65N 65Np 65Nr7 65Nm 76C

Material examined: 1 ex from Bahçesaray, Su Fabrikası 1570m (65Aö), 26 5 2016, M. Kemal & A.Koçak leg. (Cesa)

Remarks: The genus *Coriomeris* is one of the most difficult group in specific identifying in the family *Coreidae*. Two specimens were obtained in the district from two different habitats. According to the species key, based especially on the antennal hairs, number of spines on the lateral margin of pronotum, and the spines of posterior femur (Lindberg, 1923), the authors identified them as *affinis* and *denticulatus* with some hesitations (Figs. 42, 43).

Both species are apparently new to the fauna of Van Province!

**7. *Enoplops disciger* (Kolenati, 1845) (Figs. 5, 6)**

Synonym: *disciger* Kolenati, 1845 Range (in codes): Cc TR IR BG GR MK RO AZ AM GG IQ IL Pa JO SY 01 04 06 15 31 35 36 45 48 49 65 76 31M 65A 65Ai 65D 65Dn 65F 65Fz 65N 65Nc 65Nc4 65Nş 65Nm 76B 76Bf 76Bh 76Bi

**8. *Haploprocta sulcicornis* (Fabricius, 1794) (Fig. 7)**

Synonyms: *sulcicornis* Fabricius, 1794; *rotundiventris* Spinola, 1837; *reyi* Puton, 1872; *lusitanica* Seabra, 1928; *punctata* Seabra, 1928; *maroccana* Lindberg, 1932; *insularis* Lindberg, 1953 Range (in code): Cn PT ES FR IT DE PL HU YU RO MK GR MA DZ TN LY EG JO CY TR 06 09 10 16 23 65 65A 65Ai 65An

Material examined: 1 ex from Bahçesaray, Vasting 1660m (65An), 4 6 2016, M. Kemal & A.Koçak leg. (Cesa).

This species was recorded from Paşaköy and Vasting in the district. New to the fauna of Van Province!

**9. *Syromastus rhombeus* (Linnaeus, 1767) (Fig. 8)**

Synonym: *rhombeus* Linnaeus, 1767; *quadratus* Fabricius, 1775; *sinuata* Fieber, 1861; *fusca* Vidal, 1936

Kemal & Koçak, 2010b: 29, fig.29. Kemal & Koçak, 2014a: 134, fig.167. Kemal & Koçak, 2014b: 28, fig.35.

Range (in codes): Cn MA DZ TN Md PT ES FR GB SE DK DE BY UA PL CZ SK HU MD RO SS B-H HV AL MK BG GR CY CH AT IT Sa Si TR Cc AZ AM GG IR AF CN KG IQ IL Pa LB SY TJ TM UZ 01 06 08 09 10 13 16 22 23 30 31 32 34 35 36 45 50 56 65 73 76 13F 13G 13Gö 13Gğ 30D 30Df 31M 34R 34Rb 56D 56Dc 56F 56Fp 65A 65Ai 65Am4 65D 65Dh 65F 65Fb 65Fd 65Fp 65Fz 65N 65Np 65Np2 65Nm 73A 73Ak 76B 76Bf 76Bh 76Bj

Material examined: 1 ex from Bahçesaray, Paşaköy 1560m (65Ai) 9 5 2016, M. Kemal & A.Koçak leg. (Cesa). It was also observed by the first author at Upper Mukus Valley 1840m (64Am4) on 24 5 2016.

***Cydnidae***

Lis, 1999; Yazıcı et al., 2015.

**10. *Canthophorus melanopterus* (Herrich-Schäffer, 1835) (Fig. 9)**

Synonyms: *melanopterus* Herrich-Schäffer, 1835; *niger* Vidal, 1949; *contrarius* E. Wagner, 1956 Range (in codes): Cn MA DZ TN LY EG AZ AM GG IR CY IL Pa JO SY IQ TJ AL AT B-H BG CZ SK GR HU IT MT MD PT RO RU SS ES UA HV MK YU TR CN 65 76 65A 65As 65B 65Bn 65Bn1 65F 65Fd 65Fz 65N 65Np 65Nm 76B 76Bf 76Bh

**11. *Tritomegas sexmaculatus* (Rambur, 1839)**

Synonym: *sexmaculatus* Rambur, 1839 Range (in codes): ES An AL AT B-H BG HV CZ FR DE GR HU IT MK MD NL PL PT RO RU SK SS ES CH UA YU Cc TR AM AZ GG IR 13 16 22 25 33 34 39 55 59 65 75 76 13G 13Gö 13Gğ 33A 65A 65Ap 65F 65Fz 75F 76C

***Lygaeidae***

Péricart, 1998a-c.

**12. *Horvathiolus superbus* (Pollich, 1779) (Fig. 10)**

Synonyms: *superbus* Pollich, 1779; *punctatoguttatus* Fabricius, 1781; *discolor* Gmelin, 1790; *schummelii* Schilling, 1829; *melanogaster* Horvath, 1899; *confluens* Horvath, 1916; *sanctus* Horvath, 1916; *kolenatii* Horvath, 1916; *erythropus* Horvath, 1916; *conjunctus* Mancini, 1952 Range (in codes): Cn AL AT BE B-H Mst BG Vrn HV CZ FR GB DE HU IT MT MK PT RO Bnt Do RU Or Da ES TR Cc IR IL Pa Hf JO Cr TJ TM SK UA Cm Lvv YU AZ AF Bak Kir Nv AM Eri GG KG CN CY IR KK MN UZ 01 03 04 06 07 09 14 27 31 33 35 38 42 51 56 64 65 56F 56F1 65A 65Am 65Am4 65F 65Fd 65N 65Nc 65Nc4

Material examined: 1 ex from Bahçesaray, Upper Mukus Valley 1840m (65Am4), on 23 10 2016, M. Kemal & A.Koçak leg. (Cesa). Widely distributed in Van Province. Especially gregarious in late autumn.

**13. *Lasiocoris anomalus* (Kolenati, 1845) (Figs. 11a-b)**

Synonyms: *anomalus* Kolenati, 1845; *villosus* Mulsant & Rey, 1852; *aeneiceps* Baerensprung, 1859; *stabianus* A. Costa, 1862; *flori* Douglas & Scott, 1868 Range (in codes): MA Azr DZ Tlm Tni PT ES AD FR IT Si SS HV B-H MK GR Cr BG UA Cm CY TR Arr Cc GG Tbl AM AZ Nv Il Pa JO SY IR TM RU Kr 01 04 06 16 23 27 30 42 44 51 60 65 76 30C 42B 51D 51Dd 65A 65Ai 65N 65Np4 65Nm

**14. *Lethaeus cribratissimus* (Stal, 1858) (Fig. 12)**

Synonyms: *cribratissimus* Stal, 1858; *niger* Fieber, 1861; *dalmatinus* Horvath, 1881; *syriacus* Horvath, 1883 Range (in codes): CZ HV IL Pa CY Rd Cr GR AL MK YU BG B-H TR LB Bei JO SY 01 07 17 23 27 31 33 34 35 41 42 48 58 65 31M 65A 65Am 65Am1  
New to the fauna of Van Province!

**15. *Lygaeus equestris* (Linnaeus, 1758) (Fig. 13)**

Synonyms: *equestris* Linnaeus, 1758; *speciosus* Poda, 1761; *punctumalbum* Pollich, 1781; *lactans* Horvath, 1899; *sicilianus* Wagner, 1954

Kemal & Koçak, 2013: 8, fig. 6.

Range (in codes): AL AT BE B-H BG HV CZ DK DE EE FI FR GB GR HU IT LT MK MD NL? PL PT RO RU SK SS ES SE CH UA YU DZ MA TN LY EG IQ TR AZ Cc AM GG AF PK KG CN CY IR IL Pa JO KK MN Sb Us SY TJ TM UZ 09 13 38 40 44 49 50 56 58 65 73 76 13F 38H 38Hc 40G 40Gb 44L 44Lc 49E 49Ea 56F 58F 58G 58Gg 58Gk 65A 65Ai 65Am 65Am1 65Am2 65D 65Dc 65Fz 65Fq 73A 73Ak 73D 73Df 73Dfb 73H 76A 76Ac 76B 76Bf 76Bh 76C

Material examined: 3 ex from Bahçesaray, Upper Mukus Valley (65Am1, 65Am3) 1760-1850m, on 10 5 2016; 1 ex from Vasting 1650m (65An), on 9 5 2016; 1 ex from Altındere 1970m (65At1), on 26 6 2016, M. Kemal & A.Koçak leg. (Cesa)

**16. *Nysius* sp.**

This genus is one of the most difficult group to identify, and poorly known in Turkey. Several species of the genus has been reported by various authors from Turkey so far (*cymoides*, *ericae*, *graminicola*, *helveticus*, *immunis*, *senecionis*). A single specimen, captured in the district couldnot be identified at this moment; therefore its identity remains as a species in the genus *Nysius* Dallas (*Orsillinae* of *Lygaeidae* or *Orsillidae*) temporarily. Wagner revised the Palearctic species of the *Nysius*-complex in detail (Wagner, 1958; Péricart, 1998a).

**17. *Rhyparochromus pini* (Linnaeus, 1758)**

Synonyms: *pini* Linnaeus, 1758; *collinus* Scopoli, 1763; *circuluspunctatus* Goeze, 1778; *crucifer* Geoffroy, 1785; *circulus* Gmelin, 1790 Range (in codes): Cn MA Cc AZ AM AF GG TR IR CN Ui Ti MN RU Vv Ya Sb KG TJ TM UZ 06 16 33 36 37 46 65 65A 65Ac 65Ac3

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**18. *Rhyparochromus vulgaris* (Schilling, 1829)**

Synonyms: *vulgaris* Schilling, 1829; *homoeopus* Horvath, 1899 Range (in codes): AL AT BE B-H BG BY HV CZ FR DE GR HU IT MK MD NL PL RO RU SK SS ES UA YU Cc AM Eri AZ GG IR TM TR CY IL Pa 01 06 09 10 16 17 22 31 33 34 35 43 45 48 64 65 74 01H 31K 31M 65A 65Ac3 65Am 65Am1 65N 65Np 65Nm 74B

Material examined: 1 ex from Bahçesaray, Liman, Spindaran 2320m (65Ac3), 10 8 2016, M. Kemal & A.Koçak leg. (Cesa)

**19. *Spilostethus pandurus* (Scopoli, 1763)**

Synonyms: *pandurus* Scopoli, 1763; *militaris* Fabricius, 1775; *civilis* Fabricius, 1787; *surinamensis* Wolff, 1802; *elegans* Wolff, 1802; *lagenifer* Dufour, 1833; *asiaticus* Kolenati, 1845; *tetricus* Horvath, 1909

Kemal & Koçak, 2008: 3, fig. 3. Kemal & Koçak, 2014b: 25, fig. 28. Kemal & Koçak, 2016e: 20, fig. 43.

Range (in codes): Md Cn AL AT B-H BG HV CZ SK FR HU IT MK MD PT RO RU ES UA YU DZ LY EG MA TN SS Cc TR IR CY IQ TM GR AZ AF Cc AM GG IL Pa JO SA Sn SY CN Ti IQ UZ YE IN PH AU CV TD MR 01 03 06 07 09 11 15 16 17 18 20 22 23 26 27 31 33 34 35 38 39 42 43 44 45 48 51 46 64 65 67 73 44L 44Lc 46G 46Gd 65A 65Am 65Am4 65D 65Dd 65Dda 65Dg 65F 65Fp 65Fz 65K 65N 65Nc 65Np 65Np1 65Np2 65Nr2 65Nr4 65Nm 65Ku 73D 73Df 73Dfb 73H

Material examined: 1 ex from Bahçesaray, Upper Mukus Valley 1840m (65Am4) 24 5 2016, M. Kemal & A.Koçak leg. (Cesa)

**20. *Spilostethus saxatilis* (Scopoli, 1763) (Fig. 14)**

Synonyms: *saxatilis* Scopoli, 1763; *tessellatus* Goeze, 1778; *lusitanicus* Herrich-Schäffer, 1850; *montivagus* Horvath, 1899

Kemal & Koçak, 2010b: 27, fig. 25. Kemal & Koçak, 2013: 7, figs. 4-5. Kemal & Koçak, 2014b: 25, fig. 29.

Range (in codes): Cn AL AT BE B-H BG HV CZ SK FR DE GR HU IT MK PL RO PT ES SE UA YU CY TR DZ Agi Cn MA LY TN Gab EG AZ AM Cc GG RU Da St AF IQ Kku Ssa Mos Shq IR IL Pa JO SY TM UZ Ch UA Cm 12 21 27 30 31 44 46 50 56 58 65 12A 12Ab 21L 30B 30Bt1 44L 44Lc 46G 46Gd 56D 56De 56Dh 56F 58G 58Gg 65A 65Aö 65Am 65Am1 65Am2 65D 65Dc 65Dh 65Dn 65F 65Fd 65F1 65Fz 65N 65Np7 65Nm

Material examined: 2 ex from Bahçesaray, Su Fabrikası 1570m (65Aö) 26 5 2016, M. Kemal & A. Koçak leg. (Cesa)

***Miridae***

Schuh, 2002-2013.

**21. *Adelphocoris vandalicus* (Rossi, 1790) (Fig. 15)**

Synonyms: *vandalicus* Rossi, 1790; *fraxini* Fabricius, 1794; *humuli* Schummel, 1847; *taenioma* A. Costa, 1853; *denigratus* Stichel, 1930; *levis* Stichel, 1930 Range (in codes): IT DE PL FR Co MK TR 01 06 08 10 11 13 14 16 17 22 23 33 34 35 36 37 38 42 46 49 51 54 55 57 59 65 01L 13G 13Gf 42B 46A 65A 65Ai

New to the fauna of Van Province!

**22. *Brachycoleus decolor* Reuter, 1887 (Fig. 16)**

Synonyms: *scriptus* Fabricius, 1803 nec Fabr., 1794; *decolor* Reuter, 1887; *bipunctatus* Stichel, 1930; *flavus* Stichel, 1930; *marginatus* Stichel, 1930; *ornatus* Stichel, 1957 Range (in codes): TR AT FR DE RU Sb Tv MK IT 01 04 05 06 11 16 18 21 26 31 38 42 46 50 64 65 71 76 01L 31L 65A 65Ai 71B 76B 76Bf 76Bh 76C

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**23. *Closterotomus annulus* (Brullé, 1832) (Fig. 17)**

Synonyms: *annulus* Brullé, 1832; *collaris* Fieber, 1870; *fuliginosus* Reuter, 1877; *fuscescens* Reuter, 1877; *nebulosus* E. Wagner, 1974 Range (in codes): AL FR IL Pa IT HU GR HV SY Rd TR 01 07 31 33 46 65 79 80 31A 31F 31H 31L 31M 31O 65A 65Ai

**24. *Deraeocoris rutilus* (Herrich-Schäffer, 1838) (Fig. 18)**

Synonyms: *rutilus* Herrich-Schäffer, 1838; *bellicosus* Horvath, 1885; *quadrimaculatus* Jakovlev, 1889; *fasciatus* Reuter, 1904

Kemal & Koçak, 2014b: 12, fig. 3. Kemal & Koçak, 2016e: 20, fig. 45.

Range (in codes): Cc UA CY TR IL Pa MK 01 06 07 14 18 19 21 23 26 27 31 33 37 38 40 42 46 47 50 56 65 70 78 79 80 01D 01G 01H 01K 06G 06R 06T 27F 31G 31H 31K 31L 46A 46Ab 46Ad 46Ae 56D 65A 65Ai 65F 65Fd 65Fz

**25. *Grypocoris fieberi* Douglas & Scott, 1868 (Fig. 19)**

Synonyms: *fieberi* Douglas & Scott, 1868; *blandus* Puton, 1881 Range (in codes): IL Pa SY JO TR AZ Cc IR 06 13 21 23 24 27 30 31 46 47 56 65 78 80 31M 46A 46Ab 46Ad 46Ae 65A 65Ai 65D 65Dda

**26. *Horistus orientalis* (Gmelin, 1790)**

Synonyms: *orientalis* Gmelin, 1790; *leucogrammus* Gmelin, 1790; *marginellus* Schrank, 1801; *lineolatus* Brullé, 1832; *albostratus* Burmeister, 1835; *rubrostratus* Herrich-Schäffer, 1836; *consanguineus* A. Costa, 1862 Range (in codes): IN DE PL AT MT GR ES IT TR IL Pa 01 06 16 21 23 27 38 42 47 65 21O 65A 65An

New to the fauna of Van Province!

**27. *Liocoris tripustulatus* (Fabricius, 1781)**

Synonyms: *bifasciatus* Müller, 1764; *tripustulatus* Fabricius, 1781; *pictus* Hahn, 1833; *lhesgica* Kolenati, 1845; *autumnalis* Reuter, 1875; *pallens* Noualhier, 1895; *nepeticolus* Reuter, 1896; *signatus* Poppius, 1912; *bimaculatus* Stichel, 1930; *mutatus* Stichel, 1930; Range (in codes): Az Md Cn TR TM UZ CN Ui Bc 01 06 07 14 19 21 27 31 33 38 42 46 47 50 51 65 66 68 78 80 31A 31F 31M 46A 46Ab 65A 65Ai

New to the fauna of Van Province!

**28. *Lygus pratensis* (Linnaeus, 1758)**

Synonyms: *pratensis* Linnaeus, 1758; *umbellatarum* Scopoli, 1763; *rubecula* Goeze, 1778; *viridulus* Panzer, 1804; *alpinus* Kolenati, 1845 Range (in codes): IT DE AT GB RU Sb DK FR Co MK SE BE BG CY CZ FI GG Cc GR HU TR IR Ak Koa IR IN CN 01 06 07 18 19 21 26 27 31 37 38 39 40 42 46 47 50 51 57 65 66 67 70 74 78 80 01L 31M 46A 65A 65Am 65Am4 65F 65Fz



**29. *Orthops* sp.**

This genus is represented in Turkey by four species. The collected specimen resembles to *basalis* Costa. As we need more material for a precise identification, the specimen remains unidentified for the time being. A paper, recently published by Hosseini (2014) may be useful for identification of *Orthops* species in this region.

**30. *Stenodema calcaratum* (Fallén, 1807) (Fig. 20)**

Synonyms: *calcaratum* Fallén, 1807; *dentata* Hahn, 1831; *griseus* Fieber, 1861; *virescens* Fieber, 1861; *polychloros* Westhoff, 1881; *rubricata* Rey, 1894; *pallenscens* Reuter, 1904; *fuscenscens* Wagner, 1949; *aestiva* Stichel, 1957; *fuscata* Stichel, 1957; *verna* Stichel, 1957; *ternaria* Stichel, 1958 Range (in codes): SE DE PL GR GB IL Pa IT ES RU Sb Krl Sh Co FR TR MK DK KP KR 21 33 65 65A 65Ac3

Material examined: 1 ex Bahçesaray, Liman, Spindaran 2320m 10 8 2016, M. Kemal & A. Koçak leg. (Cesa)

New to the fauna of Van Province!

***Nabidae***

Kerzhner, 1996.

**31. *Nabis (Tropiconabis) capsiformis* Germar, 1838 (Fig. 21)**

Synonyms: *angustus* Spinola, 1837; *capsiformis* Germar, 1838; *angusta* Brullé, 1839; *longipennis* A. Costa, 1847; *caffra* Stal, 1855; *siticus* Walker, 1870; *elongatus* Meyer-Dür, 1870; *innotatus* White, 1877; *brullei* Lethierry & Severin, 1896 Cornelis & Coscaron, 2013.

Range (in codes): IN Bba ZA Nta Kzu Hw Cn AL B-H BG HV CZ FR GR HU PL SK YU DZ EG LY MA TN TR IR GlS Fa Ke Kh Kd Lo Kz Ss Th Ab Ak Hz Ar CN Ui AF CY Cc GG IL Pa TJ TM UZ YE JP AU AR BR CL GY MX UY PE 56 65 56F 56Fi 65A 65Ap

The authors observed this species from Bahçesaray (Van Province), and also Tangoli (Siirt Province, Şirvan). New to the fauna of Van and Siirt Provinces!

***Pentatomidae***

Rider, 2006.

**32. *Ancyrosoma leucogrammes* (Gmelin, 1790) (Fig. 22)**

Synonyms: *albolineatus* Fabricius, 1781 nec Gz., 1778; *leucogrammes* Gmelin, 1790; *nervosus* Cyrillus, 1791 nec Sc., 1763; *affine* Westwood, 1837; *tuberculatum* Bergevin, 1908

Kemal & Koçak, 2014b: 15, fig. 8.

Range (in codes): AL AT B-H HV FR GR BG IT MT MK PT SK SS ES CH Az TR IL Pa IR Cc GG AM AZ IR IQ IL JO CY EG SY TJ TM UZ KK MN 01 02 06 07 08 09 10 11 15 16 17 19 21 22 27 31 32 33 34 35 38 39 42 45 46 48 50 54 56 59 63 62 65 72 09M 31K 31Ka4 56F 56Fj 65A 65Am 65Am4 65At 65At5 65D 65Dh 65F 65Fp 65Fz

**33. *Carpocoris (s.str.) coreanus* Distant, 1899 (Fig. 23)**

Synonyms: *coreanus* Distant, 1899; *iranus* Tamanini, 1958

Kemal & Koçak, 2014a: 136, fig. 168. Kemal & Koçak, 2014b: 15-16, 29, figs. 9-11, 37.

Range (in codes): IR Ak Kfr Kh Msh Gh Ar Se Zj Th Kdv Elb GR TR AF AM AZ GG Cc IQ IL Pa EG Sn JO KG MN CN Gn Ui KK RU Sb TJ TM UZ PK 02 13 21 23 27 30 31 46 47 56 63 65 73 13A 13Ab 13Ax 13G 13Gd 13Gu 13Gw 23C 23I 30D 30Dx 56F 65A 65Ai 65Am 65Am4 65Ap 65As 65At 65B 65Bn 65Bn1 65F 65Fb 65Ff 65Fe 65Fp 65Fz 65Fq 65G 65Ga 65Gb 65Gu 65Gz 65K 65Ke 65Kz 65Kg 65N 65Np 65Np2 65Np5 65Nr2 65Nm 73A 73Ad

Material examined: 1 ex from Bahçesaray, Upper Mukus Valley 1840m (65Am4), on 24 5 2016; 1 ex Paşaköy (65Ai), on 25 5 2016; 1 ex from İhtiyartaşı Pass 2270m (65Ap), on 3 6 2016; 1 ex from Bağcılar NE 2040m (65As), on 4 6 2016; 1 ex from Altındere 1960m (65At), on 11 6 2016, M. Kemal & A. Koçak leg. (Cesa)

**34. *Carpocoris (s.str.) fuscispinus* (Boheman, 1851)**

Synonyms: *fuscispinus* Boheman, 1851; *hahni* Flor, 1856; *rugicollis* Seabra, 1925; *subrufus* Seabra, 1925; *flavescens* Seabra, 1925; *infuscatus* Seabra, 1925

Kemal & Koçak, 2014a: 136, fig. 169. Kemal & Koçak, 2014b: 17-18, figs. 12-14.

Range (in codes): AL AT BE B-H BG BY HV CZ DE FI FR DK GR HU IT Si Sa LT LV MK MD NL PL PT RO RU SK SS ES CH UA YU TR AZ AM GG CN AF IL Pa Cc IQ IR Ak Kfr Mz Zj Ma Th Es Kh Lo Ar Gh SY TJ KK KG KP KR MN IN PK 01 02 04 06 07 09 10 11 13 15 16 17 18 19 21 22 25 26 27 30 31 32 33 35 36 37 38 39 40 42 43 45 46 48 50 54 56 59 60 63 65 66 70 71 73 13A 13Ab 13Ax 56F 65A 65Am 65Am1 65Am4 65B 65Bn 65Bn1 65C 65Cb 65G 65Gu 65E 65Eb 65F 65Fi 65Fd 65Fp 65Fz 65K 65Kd 65Kg 65Ky 65Ky1 65N 65Nc4 65Ne 65Np5 65Nr3 65Nr4 65Nm 73A 73Ak

Material examined: 1 ex from Bahçesaray, Paşaköy 1600m (65Ai), on 22 10 2016; 2 ex from Upper Mukus Valley 1840m (65Am4), on 01 10 2016 and 23 10 2016, M. Kemal & A. Koçak leg. (Cesa)

**35. *Carpocoris (s.str.) pudicus* (Poda,1761) (Fig. 24)**

Synonyms: *pudicus* Poda,1761; *cinctus* Schrank,1776; *carnus* Gmelin,1790; *wilkinsonii* Westwood,1837; *pallida* Dallas,1851

Kemal & Koçak, 2013: 9, fig.8. Kemal & Koçak, 2014a: 137, fig.170.

Range (in codes): IT Si UA TR AF IL Pa IR Ak Kfr Mz Gor Th Se Kh Gh Ar Zj Cc EG SY 01 02 05 06 07 08 12 13 16 19 21 22 23 27 30 31 34 37 38 41 42 44 46 47 49 50 51 52 55 56 57 58 60 62 65 66 67 70 73 76 78 06K 06Kb 12A 12Ai 12E 12Eb 13A 13Ab 13Ax 13G 13Gs 13Gw 23C 30B 30Br 38H 38Hc 44A 44Ab 44L 44Lc 56F 56Fp 58G 58Gg 58Gj 58Gk 65A 65At 65D 65Dn 65F 65Fe 65Fz 65N 65Np 65Nm 73A 73Ad 76D 76Dg

Material examined: 3 ex from Bahçesaray, Altındere 1960m (65At), on 11 6 2016; Altındere Mağara 1910m (65At2), on 26 6 2016, M. Kemal & A.Koçak leg. (Cesa)

**36. *Codophila (s.str.) varia* (Fabricius,1787) (Fig. 25)**

Synonyms: *varia* Fabricius,1787; *lunula* Fabricius,1794; *eryngii* Germar,1814; *bilunulata* Kolenati,1846; *persica* Kolenati,1846; *nubica* Kolenati,1846; *laborans* A.Costa,1847; *distinguenda* A.Costa,1847; *longicornis* Fuente,1972

Range (in codes): DZ PT ES FR DE PL CZ SK HU AT CH IT Sa Si HV UA Cm RO BG MK AL GR CY TR Cc AZ Kir IL Pa IR Ar Ab Ak Kh Fa Gh Mz Se Th Kdv Zj SY TJ IQ SD 01 02 05 06 09 07 10 11 13 16 17 19 21 22 25 26 27 31 33 35 38 42 44 46 47 48 50 54 55 56 57 60 62 63 65 67 73 76 13A 13Ab 13Ax 31K 31Ka 44L 44Lc 56F 65A 65Ai 65Am 65Am1 65Am4 65D 65Dh 65Dj 65K 65Ky 65Ky1 65N 65Nc 65Nç 65Np 65Nr7 65Nm 73A 73Ad 76C

Material examined: 2 ex from Bahçesaray, Paşaköy 1600m (65Ai), on 22 10 2016; 4 ex from Upper Mukus Valley (65Am1, 65Am4) 1800-1840m, on 24 5 2016, 01 10 2016, 23 10 2016, M. Kemal & A.Koçak leg. (Cesa)

**37. *Dolycoris baccarum* (Linnaeus,1758) (Fig. 26)**

Synonyms: *baccarum* Linnaeus,1758; *verbasci* De Geer,1773; *subater* Harris,1780; *albidus* Gmelin,1790; *depressa* Westwood,1837; *confusa* Westwood,1837; *inconcisa* Walker,1867

Kemal & Koçak, 2014b: 19, fig.17.

Range (in codes): PT ES FR GB BE NL DE DK NO SE FI EE BY UA PL CZ SK HU CH AT SS IT Sa Si AL MK GR BG CY MD RO TR IL Pa SY IQ Cc IN PK CN Ui Ku Kun Um IR Zj Th Elb Ak Kfr Fa Es Gh Ar Kh 01 02 03 04 05 06 07 08 09 10 11 13 14 15 16 17 18 19 20 21 22 24 25 26 27 30 31 32 33 35 36 37 38 39 41 42 45 46 47 48 49 50 51 52 54 55 56 59 60 63 64 65 67 73 76 13A 13Af 13Ax 13F 30B 30Br 56F 56F1 65A 65Am 65Am4 65Aş 65B 65Bn 65Bn1 65C 65Cb 65D 65Dç 65Df 65Fz 65F 65Fp 65Fd 65Fq 65G 65Ga 65Gb 65Gu 65Gv 65Gz 65K 65N 65Nc 65Ku 73D 73Df 73E 76B 76Bf 76Bh 76C

**38. *Dyrodere umbraculatus* (Fabricius,1775) (Fig. 27)**

Synonyms: *umbraculatus* Fabricius,1775; *marginatus* Fabricius,1798 nec Linn.,1758; *aparines* Dufour,1833 Range (in codes): PT ES FR CH AT CZ SK HU UA IT Sa Si RO BG GR CY TR IL Pa JO SY IQ 01 02 03 05 06 07 10 11 14 15 16 19 20 22 27 31 34 35 39 42 43 45 46 48 50 51 52 57 59 61 65 67 68 31K 31Ka 65A 65Aö

Material examined: 1 ex from Bahçesaray, Su Fabrikası 1570m (65Aö), on 26 5 2016, M. Kemal & A.Koçak leg. (Cesa)

**39. *Eurydema (Rubrodorsalium) ventralis* Kolenati,1846**

Synonyms: *ventralis* Kolenati,1846; *hoffmanseggi* Gorski,1852; *ornata* Fieber,1861 nec Linn.,1758; *ventralis* Tamanini,1947 nec Kol.,1846

Kemal & Koçak, 2014b: 21, figs.20-21. Kemal & Koçak, 2016e: 20, fig.46.

Range (in codes): TR IR Ak Kfr Kh 01 03 04 05 06 07 08 10 11 14 15 16 17 19 20 22 25 30 34 35 36 37 39 40 41 42 43 45 48 50 51 54 57 59 60 64 65 71 36D 36Db 65A 65Am 65Am4 65D 65Dg 65F 65Fd 65Fp 65Fz 65N 65Nc

**40. *Eurydema (s.str.) ornatum* (Linnaeus,1758) (Fig. 28)**

Synonyms: *ornatum* Linnaeus,1758; *festivus* Linnaeus,1767; *pictum* Herrich-Schäffer,1833; *decoratum* Herrich-Schäffer,1833; *pustulata* Fieber,1837; *conjuncta* Kolenati,1846; *fallax* Scholtz,1847; *falleni* Gorski,1852; *umbralis* Gistel,1857

Kemal & Koçak, 2014b: 20, fig.19. Kemal & Koçak, 2016e: 20, fig.48.

Range (in codes): TR CY IR Kh ET IN PK CN Ui Bc IR Ak Kfr Ar Ss Es Gh Gor Ke Kh Km Kz Lo Mz Th Zj 01 02 03 04 05 06 07 08 09 10 11 13 14 15 16 17 18 19 21 22 23 24 25 26 27 30 31 32 33 34 35 37 38 39 42 44 45 46 47 48 50 51 52 54 55 56 57 59 60 61 63 64 65 66 67 71 73 76 77 02A 02B 02F 13G 13Gd 21K 21L 30A 30Ad 31K 31Ka 34R 34Rb 44L 44Lc 56F 63C 63G 63H 65A 65Ai 65Am 65Am4 65At 65At2 65D 65Dç 65F 65Fd 65Fz 73A 73Ad 73Ad2 76B 76Bf 76Bh

**41. *Graphosoma (s.str.) lineatum* (Linnaeus,1758)**

Synonyms: *lineatum* Linnaeus,1758; *italicus* Müller,1766; *nigrolineatus* Fabricius,1781; *shangini* Gebler,1817; *reductum* Horvath,1901; *ochraceum* Royer,1925; *obscurum* Stepanek,1926; *soosi* Halaszfy,1953; *nigriscutellatum* Halaszfy,1955; *flavolineatum* Halaszfy,1955

Kemal & Koçak, 2016e: 21, fig.50.

Range (in codes): DZ EG TN Co IT UZ TR SY RU Sb IR Ak 01 04 06 07 08 09 10 11 13 16 17 18 19 20 22 25 26 27 31 32 33 34 35 36 37 38 39 43 45 46 48 54 56 60 65 73 76 77 06R 13G 13Gd 13Gö 13Gğ 13Gü 13Gw 46B 46Bb 56F 60G 65A 65Aö 65D 65Dn 65F 65Fd 73D 73Df 76B 76Bf 76Bh

Material examined: 3 ex from Bahçesaray, Su fabrikası 1570m (65Aö) 26 5 2016, M. Kemal & A.Koçak leg. (Cesa)

**42. *Graphosoma (s.str.) melanoxanthum* Horvath, 1903 (Fig. 29)**

Synonym: *melanoxanthum* Horvath, 1903

Kemal & Koçak, 2014a: 139, fig.174. Kemal & Koçak, 2014b: 22, fig.22. Kemal & Koçak, 2016e: 21, fig. 51.

Range (in codes): Cc RU IR Elb Th Kdv AZ AM GG TR 13 21 23 25 34 65 76 13G 13Gö 13Gü 13Gw 65A 65Ai 65As 65D 65Dç 65F 65Fd 65F1 65Fp 65Fz 65N 65Nr2 65Nr4 65Nm 76C

Material examined: 1 ex from Bahçesaray, Bağcılar NE 2040m (65As), 4 6 2016, M. Kemal & A.Koçak leg. (Cesa)

**43. *Graphosoma (s.str.) semipunctatum* (Fabricius, 1775) (Fig. 30)**

Synonyms *semipunctatum* Fabricius, 1775; *interruptum* White, 1839; *wilsoni* White, 1839; *persica* Ferr., 1874; *creticum* Horvath, 1909

Kemal & Koçak, 2014a: 139, fig.175. Kemal & Koçak, 2016e: 21, fig. 52.

Range (in codes): Cn TR Cr IR AF IL Pa Cc CY Ui TM 01 02 06 08 09 13 17 19 21 22 23 25 27 31 34 35 36 38 39 44 45 46 47 48 50 54 56 59 63 65 80 06R 13G 13Gd 31M 35L 44L 44Lc 56F 56Fc 65A 65Am 65Am4 65Aö 65Aç 65F 65Fd 65Fz 65G 65Ga 65N 65Np 65Nm

Material examined: 2 ex from Bahçesaray, Su fabrikası 1570m (65Aö) 26 5 2016, M. Kemal & A.Koçak leg. (Cesa)

**44. *Palomena prasina* (Linnaeus, 1761) (Fig. 31)**

Synonyms: *prasina* Linnaeus, 1761; *roseus* O.F.Müller, 1776; *viridis* Harris, 1780; *dissimilis* Fabricius, 1781; *discolor* Wolff, 1811; *rhododactyla* Horvath, 1883 Range (in codes): MA DZ BG Cc AZ GG AM TR SY IR Gh Kh CN Ui TJ UZ 01 06 07 09 11 13 14 15 16 17 18 19 22 25 27 31 35 37 39 41 42 43 45 46 54 56 57 65 67 71 13F 56F 56F1 65A 65Ai

Material examined: 1 ex from Bahçesaray, Paşaköy 1560m (65Ai) 9 5 2016, M. Kemal & A.Koçak leg. (Cesa)

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**45. *Stagonomus (s.str.) amoenus* (Brullé, 1832)**

Synonyms: *bipunctatus* Fabricius, 1781 nec Linn., 1758; *italicus* Gmelin, 1790 nec Müll., 1766; *amoenus* Brullé, 1832; *#transparens* Fuente, 1974

Kemal & Koçak, 2016e: 21, fig. 53.

Range (in codes): SS GR TR AF IQ IR Gh IL Pa Cc SY IN 01 05 06 10 11 16 17 22 31 33 38 39 42 46 52 55 56 59 60 63 65 70 78 80 56F 65A 65At 65At2 65D 65Dl 65Dlc 65F 65Fb 65Fd 65Fp 65Fz 65N 65Nç

Material examined: 1 ex from Bahçesaray, Altındere 1910m (65At2) 26 6 2016, M. Kemal & A.Koçak leg. (Cesa)

**46. *Staria lunata* (Hahn, 1835)**

Synonyms: *lunata* Hahn, 1835; *lobulatus* Rambur, 1839; *maroccana* Lindberg, 1932; *levantinae* Fuente, 1972 Range (in codes): DZ MA TN AZ Cc GG IQ IL Pa JO LB SY AL AT B-H BG HV CZ FR DE GR HU IT MK MD PL PT RO RU SK SS CH UA YU TR IR Gh Ak CY 01 02 06 07 09 10 11 14 16 17 18 21 22 23 27 31 33 35 44 45 46 48 63 65 67 74 31K 31Ka 31M 44L 44Lc 65A 65Ai 65F 65Fb

***Pyr rhocoridae***

**47. *Pyr rhocoris apterus* (Linnaeus, 1758) (Fig. 32)**

Synonyms: *apterus* Linnaeus, 1758; *clamariensis* Fallén, 1829

Kemal & Koçak, 2010b: 28, fig.27.

Range (in codes): AF AL DZ AT BE BG Cc TR FR Co CY CZ DK GB DE GR HU IR Ak IQ IT Sa IL Pa Ch MA MN NL PL PT RO RU Sb YU ES SE CH SY TN TJ US 01 04 06 09 11 16 19 22 23 24 25 26 31 34 35 38 39 42 45 46 49 50 51 55 56 65 72 73 76 31M 56D 56Dc 65A 65Ac 65Ac3 65D 65Dh 65Dn 65N 65Ng

Material examined: 1ex Bahçesaray, Liman, Spindaran 2320m 10 8 2016, M. Kemal & A.Koçak leg. (Cesa)

***Reduviidae***

**48. *Nagusta goedelii* (Kolenati, 1856) (Fig. 33)**

Synonyms: *goedelii* Kolenati, 1856; *rugulosa* Stal, 1859; *cornutus* Jakovlev, 1876 Range (in codes): IL Pa TR Arr AZ Cc Kir AM GG IR TM IQ CY AT B-H BG HV HU MK RO RU UA YU 05 08 16 24 25 34 36 44 60 65 69 76 65A 65Ai 76C

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Material examined: 1 ex from Bahçesaray, Paşaköy 1600m (65Ai), on 22 10 2016; 1 ex from Upper Mukus Valley 1760m (65Am1), on 10 5 2016, M. Kemal & A.Koçak leg. (Cesa)

#### 49. *Reduvius personatus* (Linnaeus, 1758)

Synonyms: *personatus* Linnaeus, 1758; *ater* Poda, 1761 Range (in codes): CA US Ny DZ Cc TR AU 01 05 06 07 08 16 35 43 54 60 65 65A 65Ac 65Ac3 65F 65Fp 65Fz

Material examined: 1 ex from Bahçesaray, Liman Spindaran 2320m (65Ac3), on 10 8 2016, M.Kemal & A.Koçak leg. (Cesa)

#### 50. *Rhynocoris iracundus* (Poda, 1761)

Synonyms: *iracundus* Poda, 1761; *sanguineus* Schrank, 1776; *cruentus* Fabricius, 1787; *monspeliensis* Gmelin, 1790; *caucasicus* Kolenati, 1857; *interruptus* Kolenati, 1857; *pictus* Kolenati, 1857; *nigripes* Kolenati, 1857; *rubricoxa* Bergroth, 1890; *jucundus* Horvath, 1891; Range (in codes): AL BE B-H BG BY HV CZ DE FR HU IT MK MD PL RO SK SS ES CH UA YU AT TR IL Pa Cc AZ Ord Nv AM IN DE RU IR Elb Shh AF CN GG IQ LB SY TJ TM UZ Ch 05 12 13 24 29 48 53 60 65 13A 13Ah 13Ax 65A 65Au

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#### 51. *Rhynocoris punctiventris* Herrich-Schäffer, 1846 (Fig. 34)

Synonyms: *punctiventris* Herrich-Schäffer, 1846; *variegatus* Fieber, 1861; *dimidiatus* Dispons, 1964; *#punctiventris* Yıldırım et al., 2010 Range (in codes): TR AL BG IL Pa Js MK UA Cm AZ AM CY IR IQ LB SY RU YU 01 02 06 07 08 09 10 12 16 17 24 25 28 29 31 33 34 35 36 42 44 45 48 50 51 53 60 63 65 69 73 75 76 80 31M 65A 65Au 65F 65Fn 65Fz 73A 73Ad 76C 76D

### *Rhopalidae*

#### 52. *Corizus hyoscyami* (Linnaeus, 1758) (Fig. 35)

Synonyms: *hyoscyami* Linnaeus, 1758; *flavicans* Puton, 1881; *usticensis* Riggio, 1885; *flavescens* Rey, 1888; *collinus* Distant, 1909; *monticola* Horvath, 1917; *atropyga* Blöte, 1934; *#hyosciami* Kıyak et al., 2004

Kemal & Koçak, 2010b: 28, fig. 26. Kemal & Koçak, 2014a: 142, fig. 180. Kemal & Koçak, 2014b: 26, fig. 30.

Range (in codes): AL AT BE B-H BG BY HV CZ SK DK DE GB FI FR GR HU IE IT LT LV MT MK MD NL NO PL PT RO RU SS ES SE CH UA YU EG LY AZ AF AM CN Ui Bc Nra CY GG IR IQ IL JO Pa KK LB MN RU KP KR Sn SY TJ TM UZ MA DZ TN Cn TR IR Ak Elb Th Se Gh 13 30 31 38 44 46 50 56 65 73 76 13A 13Ac 13Ag 13Ah 13Ax 13B 13Bg 13Gw 13F 30B 30Br 31K 31Ka 38H 38Hc 44L 44Lc 46B 46Bb 56F 56Fa 65A 65Ai 65As 65B 65Bn 65Bn1 65D 65Dda 65F 65Fd 65Fp 65Fw 65Fz 65N 65Nc 65Np1 65Nr6 65Nm 73A 73Ad 73Ak 73D 73Df 76A 76Ac 76B 76Bf 76Bh

#### 53. *Liorhyssus hyalinus* (Fabricius, 1794) (Fig. 36)

Synonyms: *hyalinus* Fabricius, 1794; *gracilis* Herrich-Schäffer, 1835; *capensis* Germar, 1838; *truncatus* Rambur, 1839; *rubescens* Kolenati, 1845; *maculiventris* Spinola, 1852; *ruber* Dallas, 1852; *bengalensis* Dallas, 1852; *sanguineus* A. Costa, 1853; *dilatipennis* Signoret, 1859.

Kemal & Koçak, 2014b: 27, fig. 32.

Range (in codes): AL AT BE B-H BG BY HV CZ FR GB DE GR HU IE IT MT MK MD NL PT RO RU SK SS ES UA YU DZ Az Cn EG LY MA MR TN AZ AF AM Cc TR CN Ui CY GG IR IQ IL Pa JO KK MN OM SA SY TJ TM UZ YE ZA IN Ben Up Bba 50 65 65A 65Am 65Am4 65F 65Fz

#### 54. *Maccevethus* sp.

Both *Maccevethus* species, i.e., *errans* and *corsicus* have been reported from Turkey, so far. It is almost impossible to identify them by using their external characters. The genitalic structures will be examined separately. Wagner (1953) illustrated and distinguished *Maccevethus* taxa as four species. However, the genus is currently represented by two species only (Coreoidea SF Team, 2017).

### *Scutelleridae*

Yıldırım, et al., 2014.

#### 55. *Eurygaster* sp.

This genus is represented in Turkey by seven species. Externally variable species, therefore very difficult to decide about the identity. As we need more material for a precise identification, the specimens remains unidentified for the time being.

**56. *Odontotarsus purpureolineatus* (Rossi, 1790)**

Synonyms: *purpureolineatus* Rossi, 1790; *lutescens* Fieber, 1861; *rugicollis* Jakovlev, 1884; *insignis* Jakovlev, 1908; *#confluens* Hoberlandt, 1944

Göllner-Scheiding, U., 1990; Kemal & Koçak, 2013: 8, fig. 7. Kemal & Koçak, 2014a: 144, fig. 183.

Range (in codes): DE CZ TR IL Pa IR Cc Th Elb Kh Ar Gh SK SY TM UA Cm 01 02 06 07 08 11 16 17 21 22 25 27 32 33 36 38 46 49 53 56 58 63 65 69 73 76 56F 58G 58Gj 65A 65Ai 65Au 65F 65Fe 65Fz 65N 65Np1 65Nm

Material examined: 4 ex from Bahçesaray, Paşaköy 1600m (65Ai), on 25 6 2016; 1 ex from Upper Mukus Valley 1840m (65Am4), on 1 10 2016, M. Kemal & A. Koçak leg. (Cesa)

**List of the Homoptera species*****Cercopidae*****57. *Cercopis intermedia* Kirschbaum, 1868 (Fig. 37)**

Synonyms: *intermedia* Kirschbaum, 1868; *obliterata* Kirschbaum, 1868; *nigra* Royer, 1906; *simulans* Peneau, 1912; *turkestanica* Lindberg, 1923 Range (in codes): Cc DZ BG FR DE? GR IR IL Pa IT LB MA PT ES SW SY TR AM GG RU Da TM UA UZ 02 05 06 08 10 13 17 21 23 26 27 28 30 31 32 35 38 39 42 43 44 46 47 51 53 55 56 61 63 64 65 71 76 06R 13A 13Ab 13Ac 13Af 13Ah 13Ax 13F 13G 21N 21Nb 21Nc 21P 30D 30Df 31K 31Ka 44L 44Lc 56D 56F 65A 65Ag 65Ap 65Am 65Am1 65D 65Dda 65F 65Fd 65N 65Np 65Np1 65Nm 76B 76Bj

**58. *Philaenus (s.str.) signatus* Melichar, 1896**

Synonym: *signatus* Melichar, 1896 Range (in codes): AF AL CY GR IQ IT MA ES TR YU 01 07 35 48 65 80 65A 65Ai  
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**59. *Philaenus (s.str.) spumarius* (Linnaeus, 1758) (Fig. 38)**

Synonyms: *spumarius* Linnaeus, 1758; *leucophthalma* Linnaeus, 1758; *lateralis* Linnaeus, 1758; *leucocephala* Linnaeus, 1758 Range (in codes): AF AL DZ AT Az BE BG CN CY CS DK FI FR DE GB GR Cr HU IQ IE IT JP MN MA NL NO PL PT RO ES SE SW SY? TN TR AM AZ Cc EE GG KG KK MD RU UA UZ YU JP US Als Cf Hw Mai Ny Oh Ut Ws CA BCo On Qb 01 04 05 06 07 08 09 10 11 13 14 16 17 23 24 25 26 28 29 30 34 35 36 39 41 43 44 45 47 48 52 53 55 56 57 59 60 61 65 76 06R 13G 65A 65Ai 65B 65C 65D 65G 65L 65N 65Np 65Nm

***Dictyopharidae*****60. *Dictyophara (Euthremma) multireticulata* Mulsant & Rey, 1855**

Synonyms: *multireticulata* Mulsant & Rey, 1855; *heydenii* Kirschbaum, 1868; *curvata* Matsumura, 1910; *nemourensis* Matsumura, 1910; *oertzeni* Matsumura, 1910 Range (in codes): AL AT BG CZ FR GR TR HU IL IT PT RO ES AM AZ MD UA YU 06 07 20 65 06R 65A 65Am 65Am1 65B 65F 65Fp 65Fz

***Issidae*****61. *Agalmatium bilobum* (Fieber, 1877) (Fig. 39)**

Synonym: *bilobum* Fieber, 1877 Range (in codes): FR GR IL IT Sa ES SY TN TR UA Cm 01 02 03 06 09 10 11 15 16 17 19 20 26 27 29 31 35 39 40 43 44 45 48 55 58 59 60 64 65 66 65A 65Am 65Am4  
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***Ricaniidae*****62. *Ricania hedenborgi* Stal, 1865 (Figs. 40, 41)**

Synonym: *hedenborgi* Stal, 1865 Range (in codes): GR Rd Cr TR AM Cc 07 21 23 35 47 56 65 73 21K 47G 56F 56Fb 65A 65Am 65Am4 65D 65Dh 73A 73Ad

## Selected References

Only accessible publications for us are evaluated here.

- CoreoideaSFTeam**, 2017, Coreoidea Species File Online. Version 5.0/5.0. <http://Coreoidea.SpeciesFile.org> [Access on 25 Oct., 2017]
- Cornelis, M. & A.C. Coscaron**, 2013, The Nabidae (Insecta, Hemiptera, Heteroptera) of Argentina. *Zookeys* 333: 1-30, figs.
- Dursun, A., Kaçar, G. & M.R. Ulusoy**, 2010, The Alydidae (Hemiptera, Heteroptera, Coreoidea) of Turkey. A key to the genera, new records and a species checklist. *Ent. News* 121 (5): 487-497, figs.
- Göllner-Scheiding, U.**, 1990, Revision der Gattung *Odontotarsus* Laporte de Castelnau, 1832 (Heteroptera, Scutelleridae). *Mitt. zool. Mus. Berl.* 66 (2): 333-370, figs.
- Hosseini, R.**, 2014, A study on the genus *Orthops* Fieber (Hemiptera, Miridae, Mirinae) in Iran. *Arthropods* 3 (1): 57-69, figs.
- Kemal, M. & A.Ö. Koçak**, 2008, Occurrence of Soldier Bug (*Spilostethus pandurus*) in Van Province (Turkey) (Hemiptera, Lygaeidae). *Cesa News* 33: 1-3, 3 figs. 1 map.
- Kemal, M. & A.Ö. Koçak**, 2010a, Cicadidae of Turkey and some ecological notes on *Tibicina serhadensis* Koçak & Kemal from Van Province (East Turkey) (Homoptera). *Cesa News* 55: 1-19, 1 map, 26 figs.
- Kemal, M. & A.Ö. Koçak**, 2010b, Miscellaneous notes on the pterygot insects of Kato Mountains with illustrations their spring aspects (South East Turkey). *Cesa News* 57: 1-67, 107 figures, 1 map.
- Kemal, M. & A.Ö. Koçak**, 2013, Results of the late summer entomological trip from Van to Ankara in 2013 (Insecta, Pterygota). *Cesa News* 93: 1-37, figs.
- Kemal, M. & A.Ö. Koçak**, 2014a, Illustrated and annotated list on the Entomofauna of Gören Mount (Van Province, East Turkey), with ecological remarks I – Period of April-June 2014. *Priamus* (Suppl.) 33: 5-206, 273 figs. 1 Table.
- Kemal, M. & A.Ö. Koçak**, 2014b, Contributions to the Hemiptera fauna of Van Lake Basin (East Turkey) I. On the species of the Hemiptera of Artos Mountain. *Cesa News* 94: 1-30, 39 figs.
- Kemal, M. & A.Ö. Koçak**, 2016a, First contribution to the knowledge of the Pterygota fauna of Bahçesaray (Van Province, East Turkey). *Misc. Pap.* 161: 1-16, 21 figs.
- Kemal, M. & A.Ö. Koçak**, 2016b, On the Noctuidae fauna of Bahçesaray district (Van Province, East Turkey) (Lepidoptera). *Priamus* 14 (1): 1-74, 30 figs. 56 maps.
- Kemal, M. & A.Ö. Koçak**, 2016c, On the Geometridae fauna of Bahçesaray district, together with some morphological and eco-faunistic notes (Van Province, East Turkey) (Lepidoptera). *Priamus* 14 (2): 76-119, 69 figs. 32 maps.
- Kemal, M. & A.Ö. Koçak**, 2016d, Annotated list of the Pterygota fauna of Artos Mountain (Van Province, East Turkey). *Cesa News* 125: 1-36, 30 figs.
- Kemal, M. & A.Ö. Koçak**, 2016e, On the Entomofauna of the eastern slopes of Alacabük mountain (Gevas district, Van Province, East Turkey). *Cesa News* 124: 1-31, 74 figs.
- Kemal, M. & A.Ö. Koçak**, 2017a, On the Pyralidae of Bahçesaray district, with some eco-faunistic and taxonomical notes (Van Province, East Turkey) (Lepidoptera). *Priamus* 14 (4): 161-245, 111 figs., 62 maps.
- Kemal, M. & A.Ö. Koçak**, 2017b, On the Microlepidoptera of Bahçesaray district (Van Province, East Turkey). *Priamus* 15 (3): 125-164, 105 figs.
- Kemal, M. & A.Ö. Koçak**, 2017c, On the butterflies of Bahçesaray district (Van Province, East Turkey). *Priamus* 15 (4): 166-223, 112 figs. 17 maps.
- Kemal, M. & B. Bakan**, 2011, *Oxycarenus pallens* (H.-S.) in Van Province (East Turkey) (Hemiptera, Lygaeidae). *Cesa News* 71: 1-5, 6 figs., 1 map.
- Kemal, M., Bakan, B. & M. Yalçın**, 2013, *Graphosoma* (*Graphosomella*) *inexpectatum*, a new record for the fauna of Turkey (Hemiptera, Pentatomidae, Podopinae). *Cesa News* 85: 1-4, 7 figs.
- Kemal, M., Hakan, E., Koçak, A.Ö. & H. Tekin**, 2016, *Polysarcus elbursianus* in Van Province (East Turkey) (Orthoptera, Tettigoniidae). *Cesa News* 127: 1-10, 25 figs., 1 tab.
- Kemal, M., Koçak, A.Ö. & N. Ecer**, 2016, Second contribution to the knowledge of the Pterygota fauna of Bahçesaray (Van Province, East Turkey). *Cesa News* 126: 1-11, 1 fig.
- Kerzhner, I.M.**, 1996, Superfamily Cimicoidea Latreille, 1802 Family Nabidae A. Costa, 1853 - damsel bugs, [in] Aukema, B. & C. Rieger [ed.] *Catalogue of the Heteroptera of Palaearctic Region* 2: 84-107.
- Koçak, A.Ö. & M. Kemal**, 2010, List of the species of some pterygot orders recorded in the Province Van (East Turkey) and a description of a new species in the family Cicadidae (Insecta). *Priamus* 12 (5): 130-149.
- Koçak, A.Ö. & M. Kemal**, 2012, List of two thousand species of pterygot insects in Van Province (East Turkey). *Cesa News* 81: 2-86, 37 figs.
- Koçak, A.Ö. & M. Kemal**, 2015, Initial results of the Entomofauna of SW Asia, based upon the info-system of the Cesa (excl. Lepidoptera). *Priamus* (Suppl.) 35: 1-1185, 185 maps.

- Koçak,A.Ö. & M.Kemal**, 2017, Geographical codes used in the publications of the Cesa. *Cesa News* 135: 1-40.
- Lindberg,H.**, 1923, Über die Gattung Coriomeris Westw. (Hem. Het.). *Ann. Mus. Nat. Hung.* 20: 73-80, figs.
- Lis,J.A.**, 1999, Burrower bugs of the Old World (Hemiptera, Heteroptera, Cydnidae). *Genus* 10 (2): 165-249.
- Péricart,J.**, 1998a, Hémiptères Lygaeidae Euro-Méditerranéens. Volume 1. Généralités Systématique Première Partie. [in] *Faune de France* 84A: 1-468, pls.
- Péricart,J.**, 1998b, Hémiptères Lygaeidae Euro-Méditerranéens. Volume 2. Systématique: Seconde Partie Oxycareninae, Bledionotinae, Rhyparochrominae (1). [in] *Faune de France* 84B: 1-453, pls.
- Péricart,J.**, 1998c, Hémiptères Lygaeidae Euro-Méditerranéens. Volume 3 Systématique Troisième Partie Rhyparochrominae (2) [in] *Faune de France* 84C: 1-487, pls.
- Rider,D.A.**, 2006, Family Pentatomidae Leach,1815 [in] Aukema,B. & C.Rieger (ed.), *Catalogue of the Heteroptera of the Palaearctic Region* 5: 233-402. The Netherlands Entomological Society, Wageningen, The Netherlands.
- Schuh, R.T.**, 2002-2013, On-line systematic catalog of Plant Bugs (Insecta, Heteroptera, Miridae). <http://research.amnh.org/pbi/catalog/>
- Wagner,E.**, 1953, Über einige osteuropäische und innerasiatische Heteropteren. *Beitr. Ent.* 3: 388-394, 27 textfigs.
- Yazıcı,G., Avar,Y. & E.Yıldırım**, 2015, Contribution to the knowledge of the Cydnidae (Hemiptera, Heteroptera, Pentatomoidea) fauna of Turkey. *Turk. J. Zool.* 39: 604-609.
- Yıldırım,E., Yazıcı,G. & N.Karakurt**, 2014, Contribution to the knowledge of the Scutelleridae (Hemiptera, Heteroptera) fauna of Turkey. *Turk. J. Zool.* 38: 544-551, figs.





**Figs. 1, 2** – *Camptocoris lateralis*, from Upper Mukus Valley 1840m (65Am4), on 4 7 2016 (left); a female of the same species from Lower Mukus Valley (65Au), egg-laying position over the unopened flowers of *Achillea* (Asteraceae), with the laid eggs, on 24 6 2016 (right), M. Kemal (Cesa)



**Figs. 3, 4** – *Camptocoris tragacanthae*, from Paşaköy 1600m (65Ai) on 22 10 2016 (left); *Coreus marginatus*, from Upper Mukus Valley 1840m (65Am4) on 24 5 2016 (right), M. Kemal (Cesa)



**Figs. 5, 6** – *Enoplops disciger*, both from Paşaköy 1600m (65Ai) on various dates; on 4 8 2016 (left), on 26 6 2016 (right), M. Kemal (Cesa)



**Figs. 7, 8** – *Haploprocta sulcicornis*, from Paşaköy 1600m (65Ai) on 4 8 2016 (left); *Syromastus rhombeus*, from Upper Mukus Valley on 24 5 2016 (right), M. Kemal (Cesa)



**Figs. 9, 10** – *Canthophorus melanopterus*, from Bahçesaray, Bağcılar 2040m (65As), on 4 6 2016 (left); *Horvathiolus superbus*, from Upper Mukus Valley 1840m (65Am4), on 23 10 2016 (right), M. Kemal (Cesa)

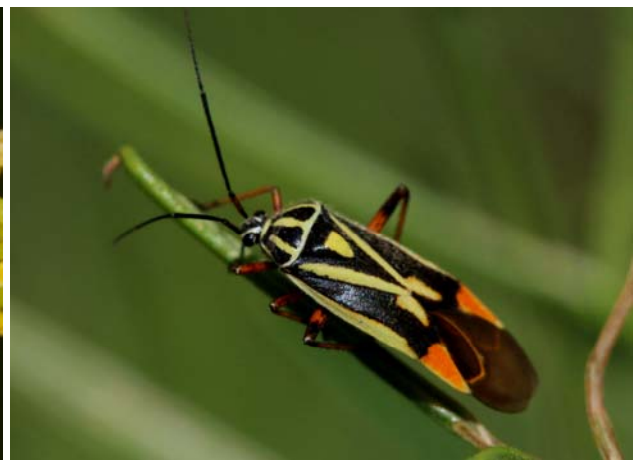


**Figs. 11a-b, 12** – *Lasiocoris anomalus*, from Bahçesaray Paşaköy 1600m (65Ai), on 25 6 2016 (a pair on the left); *Lethaeus cribratissimus*, from Upper Mukus Valley 1780m (65Am1), on 6 7 2016 (right), M. Kemal (Cesa)





**Figs. 13, 14** – *Lygaeus equestris*, from Bahçesaray Paşaköy 1600m (65Ai), on 22 10 2016 (left); *Spilostethus saxatilis* (in copula), from Su Fabrikası 1570m (65Aö), on 26 5 2016 (right), M. Kemal (Cesa)



**Figs. 15, 16** – *Adelphocoris vandilicus*, from Bahçesaray, Paşaköy 1600m (65Ai), on 5 8 2016 (left); *Brachycoleus decolor*, from same place, on 10 6 2016 (right), M. Kemal (Cesa)



**Figs. 17, 18** – *Closterotomus annulus*, from Bahçesaray, Paşaköy 1600m (65Ai), on 10 6 2016 (left); *Deraeocoris rutilus*, from same place, on 25 6 2016 (right), M. Kemal (Cesa)



**Figs. 19, 20** – *Grypocoris fieberi*, from same place, on 5 7 2016 (left); *Stenodema calcaratum*, from Bahçesaray Liman, Spindaran 2320m (65Ac3), on 10 8 2016 (right), M. Kemal (Cesa)



**Figs. 21, 22** – *Nabis capsiformis*, Bahçesaray İhtiyartası Pass 2270m (65Ap), on 3 6 2016 (left); *Ancyrosoma leucogrammes*, from Bahçesaray Altındere 1820m (65At3), on 5 7 2016, at 6:39 a.m. (right), M. Kemal (Cesa)



**Figs. 23, 24** – *Carpocoris coreanus*, Bahçesaray İhtiyartası Pass 2270m (65Ap), on 3 6 2016 (left); *Carpocoris pudicus* (in copula), from Bahçesaray Altındere 1820m (65At), on 11 6 2016 (right), M. Kemal (Cesa)





**Figs. 25, 26** – *Codophila varia*, Bahçesaray Paşaköy 1600m (65Ai), on 22 10 2016 (left); *Dolycoris baccarum*, from same place and date (right), M. Kemal (Cesa)



**Figs. 27, 28** – *Dyroderes umbraculatus*, Bahçesaray Su Fabrikası 1570m (65Aö), on 26 5 2016 (left); *Eurydema ornatum* (in copula), Bahçesaray Paşaköy 1600m (65Ai), on 23 6 2016 (right), M. Kemal (Cesa)



**Figs. 29, 30** – *Graphosoma melanoxanthum*, Bahçesaray Paşaköy 1600m (65Ai), on 5 8 2016 (left); *Graphosoma semipunctatum*, Bahçesaray Upper Mukus Valley 1840m (65Am4), on 5 7 2017 (right), M. Kemal (Cesa)



**Figs. 31, 32** – *Palomena prasina* (in copula), Bahçesaray Paşaköy 1600m (65Ai), on 12 6 2016 (left); *Pyrrhocoris apterus*, Bahçesaray Liman Spindaran 2320m, on 10 8 2016 (right), M. Kemal (Cesa)

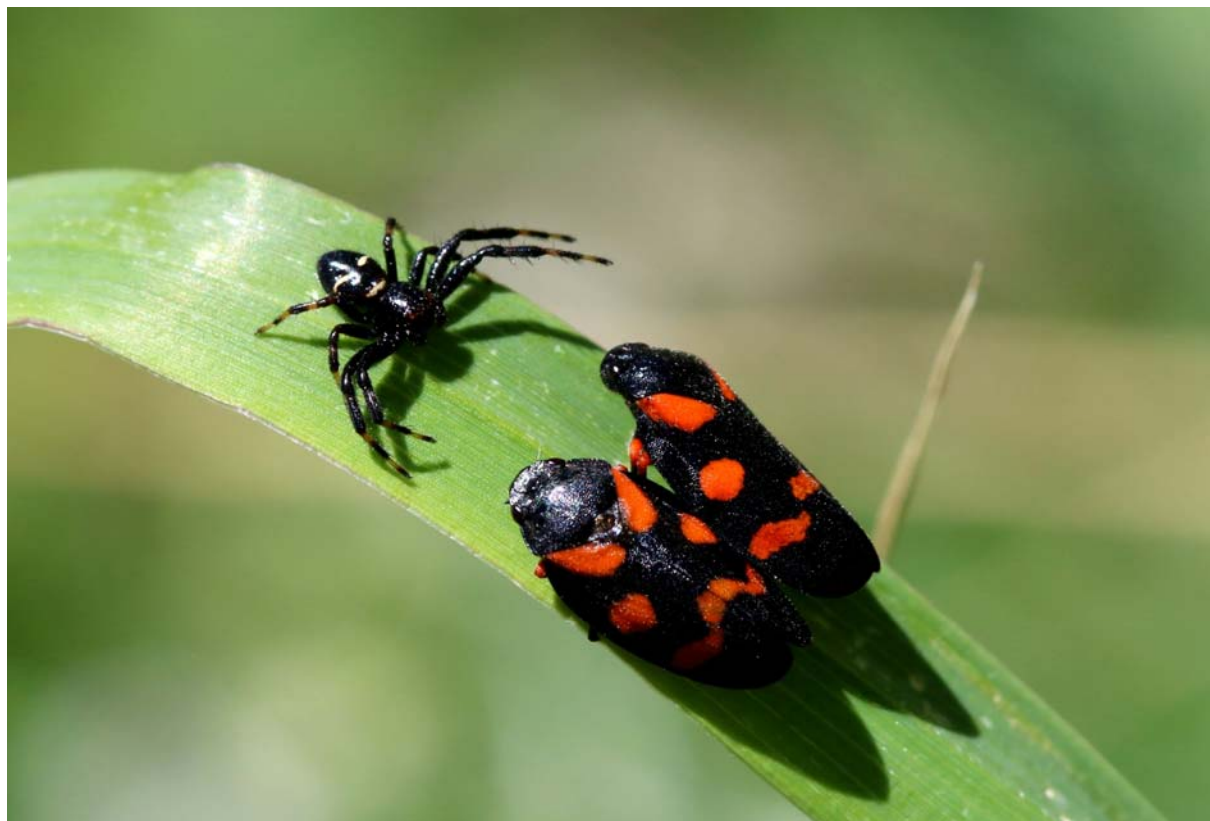


**Figs. 33, 34** – *Nagusta goedeli*, Bahçesaray Paşaköy 1600m (65Ai), on 22 10 2016 (left); *Rhynocoris punctiventris*, Bahçesaray Lower Mukus Valley (65Au), on 24 6 2016 (right), M. Kemal (Cesa)



**Figs. 35, 36** – *Corizus hyoscyami*, Bahçesaray Upper Mukus Valley 1840m (65Am4), on 26 5 2016 (left); *Liorhyssus hyalinus*, from same place and date (right), M. Kemal (Cesa)

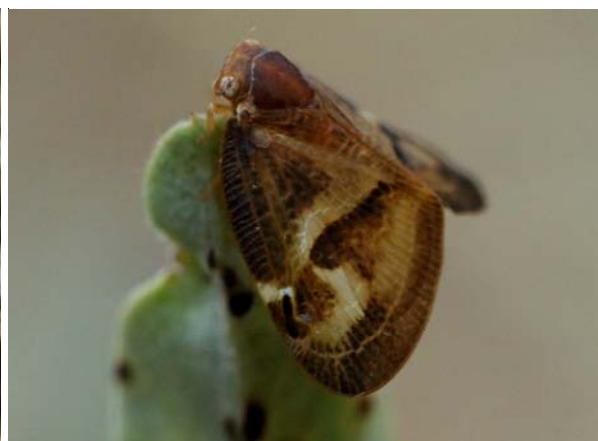




**Fig. 37** – *Cercopis intermedia* [in copula] face to face with a spider, Bahçesaray İhtiyartası Pass 2270m (65Ap), on 3 6 2016, M. Kemal (Cesa)



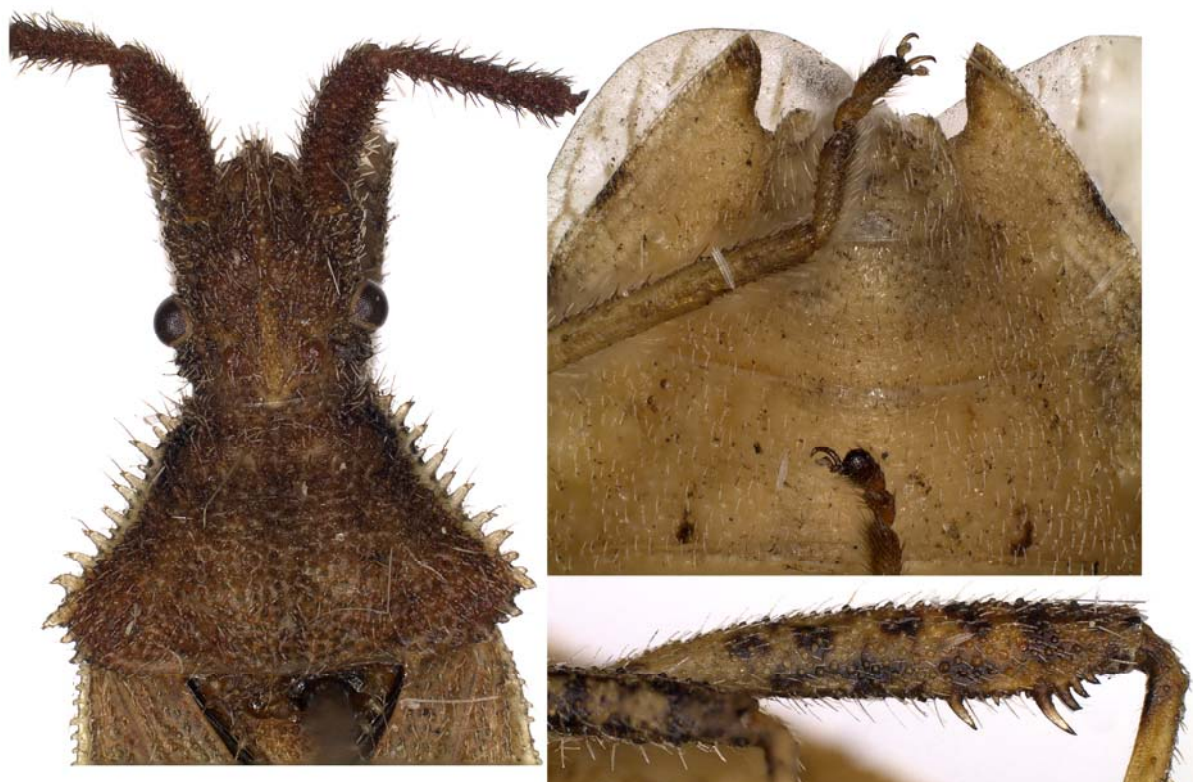
**Figs. 38, 39** – *Philaenus spumarius*, a dark form from Paşaköy 1600m (65Ai), 25 6 2016 (left); *Agalmatium bilobum*, from Upper Mukus Valley 1840m (65Am4), on 25 10 2016 (right), M. Kemal (Cesa)



**Figs. 40, 41** – *Ricania hedenborgi*, from Bahçesaray Upper Mukus Valley 1840m (65Am4), on 6 8 2016, M. Kemal (Cesa)



**Fig. 42** – *Coriomeris* aff. *affinis*, from Bahçesaray, Upper Mukus Valley. Dorsal view of pronotum, head and basal segments of antenna (left), ventral view of genital part of abdomen and spines of posterior femur (right), M. Kemal (Cesa)



**Fig. 43** – *Coriomeris denticulatus*, from Bahçesaray Su Fabrikası. Dorsal view of pronotum, head and basal segments of antenna (left), ventral view of genital part of abdomen and spines of posterior femur (right), M. Kemal (Cesa)



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